

#### The Future of Higher Education in England

The Foundation for Science and Technology debate - 17th June, 2009

Global Future - optimism

- 3 Key Points
- · International excellence
- Institutional Creativity
- · Creativity and skills of our graduates

### Professor Michael Arthur Vice-Chancellor



#### **International Excellence**

- We are 2<sup>nd</sup> in the world to the USA for Higher Education
- Highly attractive destination for international students
- 1% of world's population but 9% of publications and 13% of citations
- Citation impact: UK is ahead of US in health, biology, environment and physical sciences



### **Effective & Efficient**

Publications per \$ 1m invested in research

UK	16.6
US	9.9
Japan	3.6

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#### Importance of concentration of research funding

- Several Research Assessment Exercises have concentrated research funding over last 20 years in our best universities
- UK research performance has improved dramatically over this period
- This is being copied by China, Australia, Germany and France



#### The outcome of RAE 2008

- The research assessment exercise (RAE) 2008 reversed this trend
- Research funding from the RAE is now spread significantly more thinly
- This direction of travel is a long term mistake

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#### **Institutional Creativity**

- Dual funding allows institutional leadership teams to invest in new developments and to build on existing strengths
- Examples of interdisciplinary research addressing problems of major societal importance
- Creating new knowledge of relevance to business and industry that fuels innovation



#### Basic research is as important as applied research

Russell Group study of 123 cases of significant innovation from 16 member universities.

53% resulted from basic research, 47% from applied.

We must protect science funding, basic and applied.

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#### The graduates of research intensive universities

- We aim to produce outstanding graduates that have an impact on global society
- We want students to be inspired and to develop their full potential
- We focus on the relationship between research and education to help us achieve this



#### Research is central to education

- · Students involved in the research process
- The excitement of understanding how knowledge is created and being involved in that process
- Becoming well versed in dealing with uncertainty and leading edge activity
- Teamwork, communication and problem-solving skills

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#### The key products of a research intensive university

- New knowledge of value to society
- Research with global impact
- Innovation that fuels the economy
- Outstanding graduates that contribute widely



### The Future of Higher Education in England

This will be best served by

- · Concentrating research funds appropriately
- · Fostering an environment that supports institutional creativity
- Recognising the real long term benefits of a research led education

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#### The consequences of getting it wrong

- · Both barrels, both feet
- · Loss of international pre-eminence
- · Negative impact on the economy
- May be very difficult to recover